Introduction

Primary cardiac tumors are exceedingly rare relative to other cardiovascular pathologies, with atrial myxomas constituting the most commonly encountered subtype. These neoplasms are predominantly benign but exhibit marked heterogeneity in both size and anatomical distribution. The left atrium—specifically the fossa ovalis region—remains the most frequent site of origin. Clinically, atrial myxomas present a broad spectrum ranging from asymptomatic incidental findings to severe, life-threatening obstructive or embolic complications. This case highlights the clinical variability of atrial myxomas through the presentation of a 46-year-old male who developed symptoms mimicking advanced mitral valve stenosis and left ventricular outflow tract obstruction due to a giant left atrial myxoma.

Methods

A 46-year-old Hindu male presented with a five-month history of progressive exertional chest discomfort, dyspnoea on exertion, palpitations, and generalized fatigue. Physical examination findings were suggestive of advanced mitral valve stenosis. Routine blood investigations and chest X-ray within normal limits. Transthoracic echocardiography revealed a large echogenic mass(64mm X 35mm), mobile mass within the left atrium attach to inter atrial septum(IAS) prolapsing into left ventricle, left ventricular ejection fraction 62%, no regional wall motion abnormality, mild mitral regurgitation, mild tricuspid regurgitation mild PAH(PASP 40mmHg) consistent with a giant atrial myxoma. Comprehensive preoperative clinical and diagnostic evaluations were conducted, and surgical excision of the mass was undertaken via a right atrial approach under standard cardiopulmonary bypass protocols.

Results

Cardiopulmonary bypass was initiated following achievement of an activated clotting time (ACT) >480 seconds. Bicaval cannulation was employed to ensure optimal venous drainage and both superior and inferior vena cava taped with umbilical tape. After achieving cardioplegic arrest, right atrium opened and the tumor attached to IAS observed to prolapse into the left ventricle after opening of left atrium through inter atrium septum was meticulously resected. The aortic cross-clamp and total bypass times were 32 and 52 minutes respectively, both within favorable operative limits. Intraoperative saline insufflation testing confirmed the integrity of the mitral valve apparatus, demonstrating satisfactory leaflet coaptation, absence of regurgitation, and preservation of native valvular architecture. The inter arterial septum directly closed with 4-0 prolene suture. The patient was weaned off cardiopulmonary bypass after proper deairing of heart with minimal inotropic support and transferred to the intensive care unit in stable condition. Early extubation was achieved, and postoperative transthoracic echocardiography confirmed complete tumor excision, preserved mitral valve function, and only mild tricuspid regurgitation.

Conclusion

This clinical observation illustrates the critical importance of maintaining a high index of suspicion for atrial myxoma in patients presenting with features reminiscent of mitral valve stenosis or obstructive cardiac syndromes. Enhanced awareness of such atypical presentations promotes early diagnosis through echocardiography and prompt surgical excision remain the cornerstone of management. Stalk of tumor must be excised with the tumor to avoid recurrence.